



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/295,163	04/20/1999	ERSKINE R. BARBOUR	BMS-0082/B98	6872

7590

08/09/2002

WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
ONE LIBERTY PLACE 46TH FLOOR
PHILADELPHIA, PA 19103

EXAMINER

ABELSON, RONALD B

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 08/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/295,163

Applicant(s)

BARBOUR ET AL.

Examiner

Ronald Abelson

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 3-5,8, and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Cecchini (US 5,390,038).

Regarding claims 1 and 6, Cecchini teaches a method and apparatus for a digital serial communications hub (fig. 1 box 20). The system comprises a controller (fig. 1 box 38, 40, 42, 44, col. 4 lines 37 - 59); and a plurality of receiver-transmitter units (fig. 1 box 14, 16, 24, and 28); wherein the controller is programmed to delay (fig. 1 box 40, 44, col. 4 lines 37 - 59), route (fig. 1 box 20, 22, DATA OUT, RCV DATA) and regenerate (repeater, fig. 2, col. 6 lines 51 - 66) data at mixed baud rates (fig. 1 box 48, col. 2 lines 23 - 32, col. 10 lines 6 - 23), mixed character framing bits (start bits, stop bits, col. 2 lines 23 - 32, col. 13 lines 53 - 56) and mixed protocols (col. 2 lines 23 - 32, col. 13 lines 53 - 56) by, in part, digitizing and quantizing the incoming data (col. 2 lines 33 - 44, col. 3 line 67 - col. 4 line 7). By definition a

Art Unit: 2663

digital signal is quantized since the precision in digitizing a signal is less than infinite.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cecchini as applied to claim 1 above, and further in view of Mills (US 6,311,204).

Regarding claims 2 and 7, Cecchini fails to teach error correction.

Mills teaches that optical signals can be CRC encoded (fig. 10 box 406, col. 31 lines 25 - 63).

Therefore it would have been obvious to one of ordinary skill in the art, having both Cecchini and Mills before him/her and with the teachings [a] as shown by Cecchini, a data link interface for communicating between at least two devices or networks without regard to baud rates, character framing bits,

Art Unit: 2663

nor protocols, and [b] as shown by Mills, optical signals can be CRC encoded, to be motivated to modify the system of Cecchini by inserting the CRC processor of Mills (fig. 10 box 406) immediately after the optical receivers (Cecchini: fig. 1 box 12, 16). This would improve the system by preventing corrupted data from being transported throughout the system.

Allowable Subject Matter

5. Claim 3-5 and 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 3,4,8 and 9, nothing in the prior art teaches or fairly suggests the error correction procedure described by the applicant in combination with the other limitations of the claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald

Art Unit: 2663

Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

RA

Ronald Abelson
Examiner
Art Unit 2663

RA

August 5, 2002



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600